



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,064	12/14/2001	Naoki Yokoyama	KOKU-0006	6233

7590 06/08/2006
KNOBLE & YOSHIDA, LLC
Eight Penn Center, Suite 1350
1628 John F. Kennedy Blvd.
Philadelphia, PA 19103

EXAMINER

TAYLOR, BARRY W

ART UNIT PAPER NUMBER

2617

DATE MAILED: 06/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/017,064	Applicant(s) YOKOYAMA, NAOKI	
	Examiner Barry W. Taylor	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. Figure s 7 and 8 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 9-10 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yagawa (6,434,360) in view of Ben-Efraim (5,630,212).

Regarding claims 1 and 10. Yagawa teaches a method and system for adjusting amplification gain for a communication signal (title, abstract), comprising the steps of:

storing a predetermined standard reception sensitivity value (col. 3 lines 44-67, col. 4 lines 1-20);

amplifying the communication signal at an amplification level at a first unit (see indoor unit in figure, abstract, col. 3 line 25 – col. 4 line 20);

transmitting the amplified communication signal from the indoor unit (i.e. first unit) to a second unit (see outdoor unit in figure, abstract, col. 3 line 25 – col. 4 line 20);

receiving the communication signal at the second unit (see figure wherein outdoor unit receives signal);

comparing the received communication signal to the predetermined standard reception sensitivity value to generate a comparison signal (see col. 1 line 29 – col. 2 line 64, col. 3 line 25 – col. 4 line 20 wherein the indoor unit (i.e. first unit) uses automatic gain adjustment circuit to account for cable between the indoor and outdoor unit, to account for type of outdoor unit connected to indoor unit, and to account for rainfall attenuation);

adjusting the amplification level at the indoor unit (i.e. first unit) based upon the comparison signal until a desirable amplification is reached (see abstract, figure, col. 1 line 29 – col. 2 line 64, col. 3 line 18 – col. 4 line 20 wherein indoor unit uses automatic gain adjustment circuit to account for cable length, rainfall, and type of outdoor unit).

Yagawa does not show (see figure) the indoor unit transmitting amplification level to be stored in the outdoor unit (i.e. second unit).

Ben-Efraim also teaches indoor and outdoor units wherein outdoor unit contains memory and processor so that adjustments may be made at the outdoor unit (title, abstract, col. 1 lines 20-52, col. 2 lines 35-67, col. 3 line 18 – col. 4 line 22, col. 5 lines

Art Unit: 2617

1-15) so maintenance personal do not have to climb towers to physically adjust the outdoor unit.

It would have been obvious for any one of ordinary skill in the art at the time of invention to utilize the teachings of Ben-Efraim into the teachings of Yagawa in order to remotely program outdoor unit so maintenance personal do not have to climb towers and manually retrieve the outdoor unit.

Regarding claim 2. Ben-Efraim further teaches amplifying the communication signal at the stored amplification level at the second unit (see title, abstract, col. 1 lines 20-52, col. 2 lines 35-67, col. 3 line 18 – col. 4 line 22, col. 5 lines 1-15 wherein the outdoor unit has memory and processor so maintenance person can enter parameters at indoor unit to be used at the outdoor unit); and

transmitting the amplified communication signal from the second unit to the first unit (see col. 4 line 3 wherein the outdoor unit and indoor unit send and receive messages).

Regarding claim 3. Yagawa teaches value stored at first unit (i.e. indoor unit) so amplification adjustments may be made (col. 3 line 25 – col. 4 line 20).

Regarding claim 4. Yagawa does not teach the second unit (i.e. outdoor unit) storing the reception sensitivity value.

Ben-Efraim also teaches indoor and outdoor units wherein outdoor unit contains memory and processor so that adjustments may be made at the outdoor unit (title, abstract, col. 1 lines 20-52, col. 2 lines 35-67, col. 3 line 18 – col. 4 line 22, col. 5 lines

Art Unit: 2617

1-15) so maintenance personal do not have to climb towers to physically adjust the outdoor unit.

It would have been obvious for any one of ordinary skill in the art at the time of invention to utilize the teachings of Ben-Efraim into the teachings of Yagawa in order to remotely program outdoor unit so maintenance personal do not have to climb towers and manually retrieve the outdoor unit.

Regarding claim 5. Yagawa does not show comparing at the second unit (i.e. outdoor unit---see figure wherein comparing done at indoor unit).

Ben-Efraim also teaches indoor and outdoor units wherein outdoor unit contains memory and processor so that adjustments may be made at the outdoor unit (title, abstract, col. 1 lines 20-52, col. 2 lines 35-67, col. 3 line 18 – col. 4 line 22, col. 5 lines 1-15) so maintenance personal do not have to climb towers to physically adjust the outdoor unit.

It would have been obvious for any one of ordinary skill in the art at the time of invention to utilize the teachings of Ben-Efraim into the teachings of Yagawa in order to remotely program outdoor unit so maintenance personal do not have to climb towers and manually retrieve the outdoor unit.

Regarding claim 6. Yagawa teaches comparing at the first unit (i.e. indoor unit---see figure and columns 3-4).

Regarding claims 9 and 12. Yagawa teaches wherein the adjusting, increments the amplification level by a predetermined unit (col. 3 lines 44-46).

Art Unit: 2617

Regarding claim 13. Yagawa teaches cable (see 203 figure) connecting the outdoor unit to the indoor unit.

3. Claims 7-8, 11, 15-18 and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yagawa (6,434,360) and Ben-Efraim (5,630,212) further in view of Moerder et al (6,256,483 hereinafter Moerder).

Regarding claims 7-8, 11 and 21. Yagawa in view of Ben-Efraim fail to show the second unit (i.e. outdoor unit) transmitting to first unit (i.e. indoor unit) prior to comparing.

Moerder also teaches method and apparatus for calibrating of wireless transmitter. Moerder (see figures 5-10) teaches IDU (i.e. indoor unit) makes adjustment (col. 5 line 48 – col. 6 line 66, col. 8 lines 5-21, col. 8 lines 26-29, col. 8 lines 47-50) after receiving reception sensitivity (see either power detect 84 or temp detect 88 in figure 5) from ODU (i.e. outdoor unit).

It would have been obvious for any one of ordinary skill in the art at the time of invention to utilize the teachings of Moerder into the teachings of Yagawa and Ben-Efraim in order to remotely adjust power at the outdoor unit based upon temperature and power level detected at the outdoor unit.

Regarding claims 15 and 20. Yagawa teaches a system for adjusting amplification gain for a communication signal (title, abstract), comprising the steps of:

Art Unit: 2617

a first unit (see indoor unit in abstract and figure) for amplifying the communication signal at an amplification level (see indoor unit in figure, abstract, col. 3 line 25 – col. 4 line 20);

a second unit (see outdoor unit in abstract and figure) for receiving the communication signal (see figure wherein outdoor unit receives signal), wherein the first unit compares the received communication signal to the predetermined standard reception sensitivity value to generate a comparison signal (see col. 1 line 29 – col. 2 line 64, col. 3 line 25 – col. 4 line 20 wherein the indoor unit (i.e. first unit) uses automatic gain adjustment circuit to account for cable between the indoor and outdoor unit, to account for type of outdoor unit connected to indoor unit, and to account for rainfall attenuation).

Yagawa does not show (see figure) the indoor unit transmitting amplification level to be stored in the outdoor unit (i.e. second unit).

Ben-Efraim also teaches indoor and outdoor units wherein outdoor unit contains memory and processor so that adjustments may be made at the outdoor unit (title, abstract, col. 1 lines 20-52, col. 2 lines 35-67, col. 3 line 18 – col. 4 line 22, col. 5 lines 1-15) so maintenance personal do not have to climb towers to physically adjust the outdoor unit.

It would have been obvious for any one of ordinary skill in the art at the time of invention to utilize the teachings of Ben-Efraim into the teachings of Yagawa in order to remotely program outdoor unit so maintenance personal do not have to climb towers and manually retrieve the outdoor unit.

Yagawa in view of Ben-Efraim fail to show the second unit (i.e. outdoor unit) transmitting communication signal back to first unit (i.e. indoor unit).

Moerder also teaches method and apparatus for calibrating of wireless transmitter. Moerder (see figures 5-10) teaches IDU (i.e. indoor unit) makes adjustment (col. 5 line 48 – col. 6 line 66, col. 8 lines 5-21, col. 8 lines 26-29, col. 8 lines 47-50) after receiving reception sensitivity (see either power detect 84 or temp detect 88 in figure 5) from ODU (i.e. outdoor unit).

It would have been obvious for any one of ordinary skill in the art at the time of invention to utilize the teachings of Moerder into the teachings of Yagawa and Ben-Efraim in order to remotely adjust power at the outdoor unit based upon temperature and power level detected at the outdoor unit.

Regarding claim 16. Yagawa in view of Ben-Efraim fail to show the second unit (i.e. outdoor unit) transmitting to first unit (i.e. indoor unit) prior to comparing.

Moerder also teaches method and apparatus for calibrating of wireless transmitter. Moerder (see figures 5-10) teaches IDU (i.e. indoor unit) makes adjustment (col. 5 line 48 – col. 6 line 66, col. 8 lines 5-21, col. 8 lines 26-29, col. 8 lines 47-50) after receiving reception sensitivity (see either power detect 84 or temp detect 88 in figure 5) from ODU (i.e. outdoor unit).

It would have been obvious for any one of ordinary skill in the art at the time of invention to utilize the teachings of Moerder into the teachings of Yagawa and Ben-

Art Unit: 2617

Efraim in order to remotely adjust power at the outdoor unit based upon temperature and power level detected at the outdoor unit.

Regarding claims 17 and 22. Yagawa teaches wherein the adjusting, increments the amplification level by a predetermined unit (col. 3 lines 44-46).

Regarding claims 18 and 23. Yagawa teaches cable (see 203 figure) connecting the outdoor unit to the indoor unit.

4. Claims 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yagawa (6,434,360) and Ben-Efraim (5,630,212) further in view of Applicants admitted prior art shown in figures 7 and 8.

Regarding claims 14. Yagawa in view of Ben-Efraim fail to show network connected to the indoor door unit.

Applicants have admitted (see figures 7-8) that indoor unit (see IDU figure 8) typically connected to public network via cable 3.

It would have been obvious for any one of ordinary skill in the art at the time of invention to incorporate admitted prior art into the teachings of Yagawa and Ben-Efraim in order to provide an indoor and outdoor unit connected to a public network.

5. Claims 19 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yagawa (6,434,360) and Ben-Efraim (5,630,212) in view of Moerder et al (6,256,483 hereinafter Moerder) and Applicants admitted prior art shown in figures 7 and 8.

Art Unit: 2617

Regarding claims 19 and 24. Yagawa in view of Ben-Efraim and Moerder fail to show network connected to the indoor unit.

Applicants have admitted (see figures 7-8) that indoor unit (see IDU figure 8) typically connected to public network via cable 3.

It would have been obvious for any one of ordinary skill in the art at the time of invention to incorporate admitted prior art into the teachings of Yagawa and Ben-Efraim in order to provide an indoor and outdoor unit connected to a public network.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor, telephone number (571) 272-7509, who is available Monday-Thursday, 6:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost, can be reached at (571) 272-7872. The central facsimile phone number for this group is **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (571) 272-2600, the 2600 Customer Service telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Centralized Delivery Policy: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the central fax number (571-273-8300).

Barry W. Taylor
Art Unit 2617


BARRY TAYLOR
PRIMARY EXAMINER